A Secure Cloud: Is There Such a Thing?

A secure cloud is attainable. In fact, these industry luminaries say clouds can be more secure than physical infrastructure.

Why is security still inhibiting cloud adoption?

David Hunter: Recent public cloud services failures have led to more caution with deploying cloud, specifically the public cloud. Coupled with more smartphones than PCs today and 35 trillion gigabytes of data by 2020, IT leaders are concerned with lack of control.

Arthur Coviello: To that point, you can’t secure what you can’t manage. But that has nothing to do with the cloud. The cloud is merely an extension of the existing infrastructure, which isn’t necessarily secure. Control and visibility need to be addressed, but you can use virtualization to do that. We can make cloud more secure than today’s physical infrastructure.

Is there such a thing as a secure cloud?

DH: Not all clouds are created equal. Select a vendor based on its ability to address enterprise security requirements across private and public clouds. Use common security standards and ensure security is transparent and auditable. Clearly define your business requirements and establish SLAs for the right level of protection.

AC: There are certain best practices of security that must be adapted to the cloud—authentication, access control, privacy, confidentiality and compliance. The controls to implement these practices can be embedded into the virtual layer so that provisioning is automated and enforcement of policies can be ensured. Also the technology exists today to give practitioners visibility into the cloud to prove compliance.

Will data shift from private to public clouds?

DH: Data needs to be close to the computing environment—private or public. But, it doesn’t mean you need to compromise on security. Understand the security and compliance requirements of your data and then choose the right model.

AC: Woe to the CSOs that think that train won’t leave the station without them. A lot of SaaS decisions are being made by the business units. And despite all this media hype about security concerns, the business people aren’t waiting.

How can CSOs build security in the cloud?

DH: From a technology standpoint, CSOs need a virtual foundation to increase control and visibility. First, security becomes logical and information-centric so policies follow the workloads as they travel across the cloud. Second, it becomes built-in and automated so security is dynamic and distributed throughout the cloud. And third, security becomes risk-based and adaptive to anticipate and address evolving threats.

AC: Still, there’s too much focus on the technology. Most problems arise due to soft issues that are not thought through. You have to start with governance, risk and compliance (GRC) in a qualitative way. It’s about governance of day-to-day operations and risk management. And once you’ve assessed the risk, you need policies to mitigate that risk and ensure compliance.

What does VMware and RSA offer?

DH: VMware’s adaptive security is designed for the cloud. With vShield’s unified security policy framework, you have comprehensive protection for hosts, networks, VMs, applications, and data. You can also securely isolate apps with different trust levels, quarantine compromised apps, and protect sensitive business data. And to maintain continuous compliance and accelerate remediation of issues, we offer vCenter Configuration Manager.

AC: RSA is known for its security technology, which we’ve extended to secure the cloud—from authentication and data loss prevention to encryption and key management. To manage all aspects of this, we offer enVision SIEM (Security Information and Event Management) technology and Archer eGRC platform, which is integrated with the VMware environment for visibility into over one hundred security attributes. Also coming is Cloud Trust Authority, a set of cloud-based offerings for securely using cloud services with more scalability and efficiency.